**Before the**
**Federal Communications Commission**
**Washington, DC 20554**

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| In the Matter of | ) | |
| | ) | |
| Streamlining Deployment of Small Cell | ) | WT Docket No. 16-421 |
| Infrastructure by Improving Wireless | ) | |
| Facilities Siting Policies; Mobilitie, LLC | ) | |
| Petition for Declaratory Ruling | ) | |

**COMMENTS**
**OF NTCA–THE RURAL BROADBAND ASSOCIATION**

## I. INTRODUCTION

NTCA–The Rural Broadband Association ("NTCA")[1] hereby submits these Comments in response to the Public Notice[2] in the above-captioned proceeding. In the PN, the Federal Communications Commission (the "Commission") requests public input on potential Commission actions to help expedite the deployment of next generation wireless infrastructure by providing guidance on how federal law applies to local government review of wireless facility siting applications and local requirements for gaining access to rights of way. Specifically, the Commission seeks to develop a factual record that will help it "assess whether and to what extent

[1] NTCA represents approximately 850 independent, community-based telecommunications companies and cooperatives and more than 400 other firms that support or are themselves engaged in the provision of communications services in the most rural portions of America. All of NTCA's service provider members are full service rural local exchange carriers ("RLECs") and broadband providers, and many provide fixed and mobile wireless, video, satellite and other competitive services in rural America as well.

[2] *Comment Sought on Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies; Mobilitie, LLC Petition for Declaratory Ruling*, Public Notice, WT Docket No. 16-421 (Dec. 22, 2016) ("PN").

the process of local land-use authorities' review of siting applications is hindering, or is likely to hinder, the deployment of wireless infrastructure.[3]

Rural carriers, including NTCA's members, serve approximately 5 percent of the population of the United States but approximately forty percent of its landmass. These companies operate in rural and tribal areas long ago left behind by larger service providers because the markets were too high-cost – too sparsely populated, too far from larger towns and cities, and/or too challenging to serve in terms of topography, terrain, and lack of subscriber density. Many NTCA members offer fixed or mobile wireless service to their rural communities, and many that do not offer wireless do provide the fiber backbone that is essential for the operation of any wireless network. Rural providers have been at the forefront of the broadband evolution for years, making every effort to innovate and deploy advanced networks that respond to consumer and business demands for the cutting-edge services that urban consumers take for granted. For rural America, such infrastructure enables economic development and job creation not only in agriculture, but for any other industry or enterprise that requires robust connections to operate in the modern world.[4]

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[3] PN, p. 2.

[4] In April of 2016, the Hudson Institute, in conjunction with the Foundation for Rural Service (FRS), released a report examining the economic benefits of rural broadband infrastructure. This report determined that the investments and ongoing operations of small rural broadband providers contribute $24.1 billion annually to the nation's gross domestic product, with 66 percent ($15.9 billion) of that amount accruing to the benefit of urban areas. The report also found that rural broadband investment is an important driver of job growth, estimating that 69,595 jobs – 54 percent of which are with vendors and suppliers in urban areas – can be attributed directly to economic activity of small rural broadband providers. The Hudson Institute, "The Economic Impact of Rural Broadband," April 2016, ("Hudson Paper"). https://s3.amazonaws.com/media.hudson.org/files/publications/20160419KuttnerTheEconomicImpactofRuralBroadband.pdf.

## II. 5G "DENSIFICATION" WILL REQUIRE EXTENSIVE TERRESTRIAL FIBER BACKHAUL TO ACHIEVE ITS POTENTIAL

Broadband providers of all kinds continue to invest heavily in their networks to help ensure they are prepared to meet the customer demands of the future. Although the Commission's PN is exclusively focused on the challenges associated with small cell deployment as they relate to the siting of wireless facilities,[5] wireless networks rely heavily on the landline network, and this reliance will only increase with 5G, since only a small portion of the last-mile customer connection (i.e., the local loop) will use wireless technologies. As explained in a recent white paper submitted to the Commission by NTCA (attached), "5G networks are predominantly landline deep fiber networks,[6] with only a very small portion of their network using a wireless technology."[7]

Chairman Pai recently acknowledged this when he observed:

> "[O]ur 5G future will require a lot of infrastructure, given the 'densification' of 5G networks. In my country alone, operators will have to deploy millions of small cells, and many more miles of fiber and other connections to carry all this traffic."[8]

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[5] It must be recognized that while 5G will play a crucial role in broadband deployment, it is unlikely to be viable on a widespread basis outside of towns with reasonably dense, relatively compactly-settled populations. The extreme densification and short-haul small cell ranges that will be necessary to achieve 5G generally will make it most promising and effective only in dense urban scenarios.

[6] A "deep fiber network" is a network where the network serving the customer is predominantly fiber and the fiber from the central office either terminates at the customer premise or terminates close to the customer premise.

[7] *See*, Vantage Point, *Evaluating Wireless Technologies as a Complement or Substitute for Wireline Broadband* ("Vantage Point"). https://www.ntca.org/images/stories/Documents/Press_Center/2017_Releases/02.13.17%20fcc%20ex%20parte-ntca%20letter%20submitting%202017%20technical%20paper%20wc%2010-90.pdf (Attached).

[8] *See*, Remarks of Federal Communications Commission Chairman Ajit Pai at The Mobile World Congress, Barcelona, Spain, February 28, 2017, http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0228/DOC-343646A1.pdf

Clearly, the way to increase broadband capability in any network is to increase the amount of fiber in the network.

Estimates put 5G small cell deployments at ten times the number of sites as their current 4G macro-cell counterparts.[9] This will vastly increase the need for penetration of fiber much deeper toward serving areas/locations and associated backhaul. Therefore, to tackle the deployment challenges of small cell 5G deployment, it is imperative that, as Chairman Pai has recognized, the Commission address the deployment challenges of wireline broadband providers in addition to the siting issues associated with placement of small cells. Put another way, a "stranded" small cell without connectivity to it will do little to advance the cause of 5G services for the benefit of consumers.

## III. WIRELESS AND WIRELINE FACILITIES FACE SIMILAR DEPLOYMENT CHALLENGES

Deploying and sustaining rural wired and wireless broadband is challenging and expensive. Sufficient resources are necessary to ensure that broadband is ubiquitously deployed and sustained. Barriers to broadband deployment, including federal and local regulatory red tape and needless delay, drive up the cost of deployment and unnecessarily delay deployment to unserved communities.

Both wireline and wireless providers face challenges in gaining reasonable and timely access to federal and municipal rights-of-way ("ROW"). NTCA's members report that some localities refuse to negotiate ROW access agreements, or needlessly extend the negotiating process. ROW and pole attachments may be looked at as revenue generating and fees for access may be far removed from the cost of providing such access.

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[9] Vantage Point, p. 19.

The rights-of-way application process is often complicated by a multijurisdictional effort that requires carriers to navigate different processes at various levels of government in addition to doing so across federal agencies. In Utah, providers have faced construction delays due to inter-agency permitting disagreements between the Bureau of Land Management and the U.S. Department of Transportation. In South Dakota, a small rural provider's multimillion-dollar fiber deployment requiring U.S. Forest Service approval faced delays that took more than a year to resolve. Also in South Dakota, work on historical preservation coordination among different entities forced a company to assign four staff members over the course of a year to work on getting it resolved.. NTCA members have also raised concerns about experiences with inefficient and repetitive required studies at the federal level and unnecessary and expensive bonding requirements.

Furthermore, confusion about control of the rights-of-way for State roads causes construction delays and increased or unreasonable fees for franchise rights and pole attachments may turn already high-cost rural infrastructure projects into unjustifiable or unsustainable investments.

The FCC can help overcome these challenges by encouraging sound policies at the federal, state and local levels.[10] While the ability of the Commission to compel such policies

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[10] *See* Statement of Shirley Bloomfield, Chief Executive Officer of NTCA-The Rural Broadband Association before the United States Senate Committee on Commerce, Sciene & Transportation, *Connecting America: Improving Access to Infrastructure for Communities Across the Country,"* March 1, 2017. http://www.commerce.senate.gov/public/?a=Files.Serve&File_id=9D2190D3-D34E-422B-9E8D-BD2404BBAF90. Furthermore, there are many efforts already underway to examine and address such concerns. In addition to the Commission's efforts, the Mobile NOW legislation introduced by Chairman Thune and Ranking Member Nelson highlights the significance of streamlined permitting and siting in a national broadband deployment strategy. *See*, Summary, S. 19, *Making Opportunities for Broadband Investment and Limiting Excessive and Needless*

may be limited, as discussed in the section that follows, the more the Commission can encourage or entice creativity and collaboration in developing such policies at all levels of government, the more rapid and successful the nation's transition to 5G services will be.

## IV. THE COMMISSION CAN FACILITATE THE DEPLOYMENT OF WIRELESS AND WIRELINE INFRASTRUCTURE BY ENCOURAGING BROADBAND-FRIENDLY PROCEDURES

The PN laudably seeks ways to expedite the deployment of broadband facilities. The extent of the Commission's authority to preempt local rules and regulations is an important question. However, it may be preferable for the Commission to adopt guidelines to incent local governments to adopt broadband deployment friendly policies.

Sections 253(a) and 332(c)(7) establish that "[n]o State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity" to provide personal wireless services or other telecommunications services.[11] The Commission has correctly interpreted its duty to act when action by a locality "materially inhibits or limits the ability of any competitor or potential competitor to compete in a fair and balanced legal and regulatory environment."[12] At the same time, States and local governments retain their traditional authority over the placement, modification and construction of personal wireless facilities and public rights-of-way.[13]

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*Obstacles to Wireless Act or the MOBILE NOW Act*, https://www.congress.gov/bill/115th-congress/senate-bill/19.

[11] 47 U.S.C. §253(a); 47 U.S.C. § 332(c)(7)(B)(ii).

[12] *California Payphone Association Petition for Preemption*, 12 FCC Rcd 14191, 14206, ¶ 31 (1997).

[13] Section 253(c) provides that "[n]othing in this section affects the authority of a State or local government to manage the public rights-of-way or to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and

Individual State or local actions may rise to the level of prohibiting an entity from providing service. Those regulations that effectively prevent companies from upgrading systems, approval delays beyond what can objectively be considered reasonable, and exorbitant fees should be preempted, but the majority of local decisions should be left to the localities. As the Georgia Municipal Association, Inc. pointed out, there are reasons different localities may have different requirements. It said, for example, "relatively stringent height requirements or mandatory stealth installations may be appropriate for historical city centers, but such provisions may be inappropriate for exurban or rural communities."[14] Local governments also have an obligation to protect the public safety and welfare as it considers siting applications.[15]

Rather than proscriptive federal rules and regulations that, given the number of public and municipal comments already filed,[16] are likely to be the subject of lengthy litigation, the Commission should consider creative ways to incent States, municipalities and tribal authorities to adopt laws, rules and regulations that fit within Commission created guidelines. A streamlined, unified process and publicly available "best practices" that provide certainty to applicants would reduce manpower and financial expenditures of carriers better spent on broadband deployment. The Commission could, for example, incent communities to adopt

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nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis, if the compensation required is publicly disclosed by such government." 47 U.S.C. § 253(c)

[14] Comments of the Georgia Municipal Association ("GMA") in WT Docket No. 16-41 (Feb. 28, 2017).

[15] *See, e.g.*, Reply Comments of the St. Joseph (Michigan) Road Commission in WT Docket 16-41 (Feb. 28, 2017); Brief Comment of Kelly Bekken Manager, Missaukee County Road Commission in WT Docket 16-421 (filed Feb. 28. 2017) and Brief Comment of the Delta County Road Commission in WT Docket 16-41 (filed Feb. 24, 2017).

[16] As of March 8, 2017, more than 660 companies, local governments and individuals had participated in this proceeding.

suggested "best practices" by creating a certification and recognition process that provides the opportunity for municipalities to announce that they are wireless and wireline "broadband friendly."[17] In terms of rights-of-way and access to other critical inputs such as pole attachments and conduits, it is important that policies and procedures in these areas enable providers of all types to operate on an equal footing. Policies should in this area should not favor one class of providers over another and should ensure that private operators are not unduly disadvantaged by an uneven playing field as it relates to government-owned broadband networks.

As an example, the Commission should look to the State of Wisconsin. The State Broadband Office at the Public Service Commission developed a "Broadband Forward!" initiative whereby the public service commission will certify a community as "Broadband Forward!" if that community adopts a model ordinance.[18] The Broadband Forward! Community Model Ordinance and application attempts to facilitate certification and statewide consistency. Certification requires the local units of government to streamline administrative procedures by appointing a single point of contact for all matters relating to a broadband network project and adhering to a timely approval process. Certified companies may charge only reasonable fees for reviewing applications and issuing permits, impose only reasonable conditions on a permit and may not discriminate between telecommunications

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[17] This concept is similar to the "Municipal Race-to-the-Top" program suggested by the Commission's Technological Advisory Council in 2011, which encouraged best practices and model rights of way codes. In a similar vein at the federal level, Recommendation 2 suggested a streamlined and coordinated approach to encourage infrastructure deployment on federal lands and buildings. *See*, Technological Advisory Council – 2011 (TAC 2011), https://www.fcc.gov/oet/tac/2011.

[18] http://psc.wi.gov/utilityinfo/tele/broadband/bbForward.htm

service providers.[19] Under Wis. Stat. § 196.504(4) a city, village town or county may apply to the Commission for certification as a Broadband Forward! Community. The community certification signals that a local unit of government has taken steps to reduce obstacles to broadband infrastructure investment and that it is eager for broadband investment.

The GMA also has a model right of way licensing agreement, developed for the petitioner in this proceeding, for placement of equipment in municipal rights of way. The model agreement, "imposes reasonable regulations on the placement and maintenance of equipment in the right-of-way while also addressing reasonable compensation to be paid . . ."[20] The GMA also developed a model ROW permit ordinance that it believes helps streamline deployment of small cell infrastructure in the ROW and a master ROW communications agreement and communications license agreement to help facilitation mall cell infrastructure deployment on municipal owned utility poles.[21]

A streamlined, unified process and publicly available "best practices" that provides certainty to applicants may reduce manpower and financial expenditures of carriers better spent on broadband deployment. It will also establish parameters in which the Commission would consider restrictions, fees and approval timelines to be presumptively reasonable. A certification process will offer communities the "bragging rights" will likely help incent States, localities and tribal authorities to voluntarily adopt the guidelines.

## V. CONCLUSION

As the Commission considers steps that it might take to facilitate the deployment of 5G infrastructure, it should consider that terrestrial broadband infrastructure must be similarly

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19 *Id.*

20 GMA Comments, p. 3.

21 *See,* Attachments to GMA Comments.

deployed for 5G technology to function. The Commission has an opportunity to take a leadership role in helping jurisdictions at all levels – local, state, tribal, and federal – to craft best practices, streamline procedures, and minimize fees. The Commission should consider a certification or recognition program to incent local, state, and tribal governments that take steps to encourage landline and wireless broadband deployment, and encourage fellow federal agencies to work together to establish streamlined, consistent producers that will improve, rather than impair, the ability of broadband providers to deploy infrastructure.

Respectfully submitted,


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